

**Presentation To  
Tennessee Valley Authority  
Board of Directors**

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## INTRODUCTION

### **EKPC: Preparing for The Future**

East Kentucky Power Cooperative (EKPC), through its 16 member distribution cooperatives, serves nearly half a million homes, farms and businesses located in about three-quarters of Kentucky's counties. For more than 60 years, EKPC has been a leader in improving the quality of life for rural Kentuckians.

EKPC member cooperatives are among the fastest growing utilities in the state and nation. Faced with rapid load growth, an expanding state economy and dynamic regulatory and market environments, the cooperative has taken innovative steps to serve the interests of its members.

In 2005, EKPC brought online Kentucky's first coal-fired generating unit in 15 years. It is the first of three identical units that are planned to be online by 2009. It ranks as one of the cleanest coal-powered units in the nation, and the cleanest in Kentucky. The 268-MW unit implements a clean-coal technology known as circulating fluidized bed to produce 98 percent less sulfur dioxide than conventional coal-powered plants, and 80 percent less nitrogen oxide. This technology also allows the unit to burn lower-quality grades of coal that are more affordable.

In recent years, EKPC has spent \$200 million on environmental control equipment including two selective catalytic reduction units. Plans are under way for the installation of scrubbers to reduce emissions of sulfur dioxide and particulates from two generating units that represent nearly half of EKPC's generating capacity.

In April, EKPC unveiled its fourth generating station powered by methane from landfills, contracts have been signed for a fifth methane-to-electricity plant. EKPC is one of the largest wholesale suppliers of renewable energy in the southeastern United States. The power produced by the landfill-gas plants is marketed by member cooperatives under the EnviroWatts program.

All of these steps help provide EKPC with flexibility to respond to increasing fuel costs while meeting stringent air-quality standards. Like electric utilities nationwide that depend on coal to fuel their plants, EKPC faces volatile markets for fuels as well as emissions credits. EKPC is working to address this volatility while planning for continued load growth at a rate twice the rest of the state.

### **EKPC & the Tennessee Valley Authority: A Long Partnership**

EKPC and the Tennessee Valley Authority (TVA) have enjoyed a long and mutually beneficial relationship. TVA serves as EKPC's security coordinator and has done so since 2001. That relationship was spawned from an early effort to form a regional transmission group. EKPC also partnered with TVA to establish the regional Open Access Same Time Information System (OASIS) system for reserving transmission capacity. And EKPC has an agreement to lease TVA's 161-kV Summershade to Green River transmission line. Also, EKPC is a grandfathered company under the 1959 amendment to the TVA Act that established the TVA service boundaries, also known as the "fence" or "wall."

EKPC's current leadership has a long history with TVA. EKPC's president and CEO Roy Palk spent 17 years with two TVA-served distribution systems. He was the director of member services for Tri-County EMC in Lafayette, Tennessee from 1970-1975 and the general manager of Upper Cumberland EMC from 1975-1987. While in the TVA

system, Palk served in various positions with the Tennessee Valley Public Power Association, the trade association for TVA distributors, including chairman of its Rates and Contracts Committee and also as its board chairman. Palk was a founding director of a captive insurance company for TVA Power distributors.

## FERC INTERCONNECTION CASE

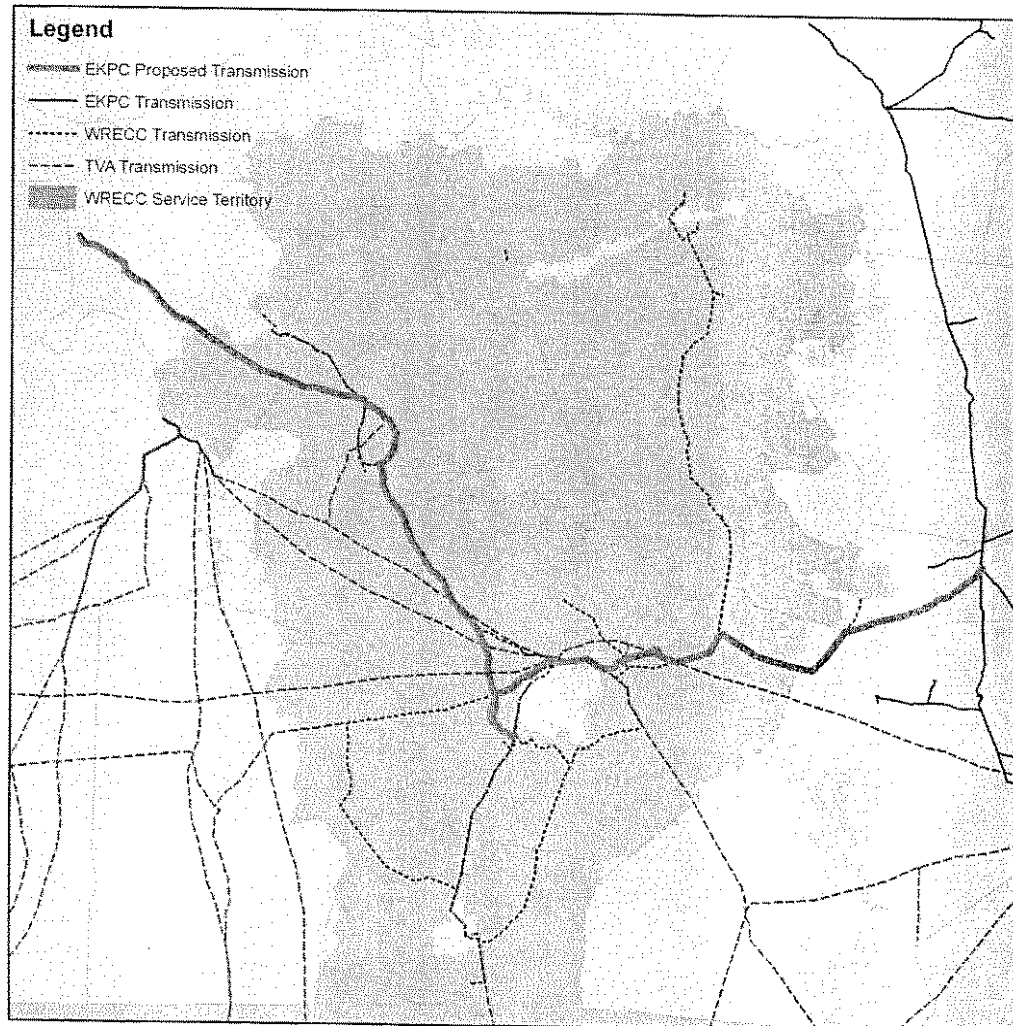
### Linking Two Cooperatives

In 2004, Warren Rural Electric Cooperative Corp. (WRECC) evaluated its plans for long-term power supply and determined that becoming EKPC's 17<sup>th</sup> member-owner would best serve the interests of WRECC's 55,000 members. On May 11, 2004, EKPC's board approved a resolution accepting WRECC's application for membership.

The relationship between EKPC and WRECC is a natural fit. Both are not-for-profit, member-owned, Kentucky cooperatives. Both co-ops share the mission of improving the lives of rural Kentuckians. In joining with EKPC, WRECC will gain an equity stake, a seat on the board and a strong hand in determining its own future.

In 2003, WRECC had given TVA five-year notice that the cooperative planned to terminate its agreement with TVA. WRECC subsequently signed a 33-year agreement for EKPC to become its sole power provider on April 1, 2008. In planning this transition, EKPC asked TVA to provide transmission service via TVA's existing transmission system, but TVA rejected the proposal and has consistently stated since then that it is not required to provide transmission service if the power being transmitted would be consumed within TVA's area of service.

**Figure 1: EXISTING & PROPOSED TRANSMISSION LINES**

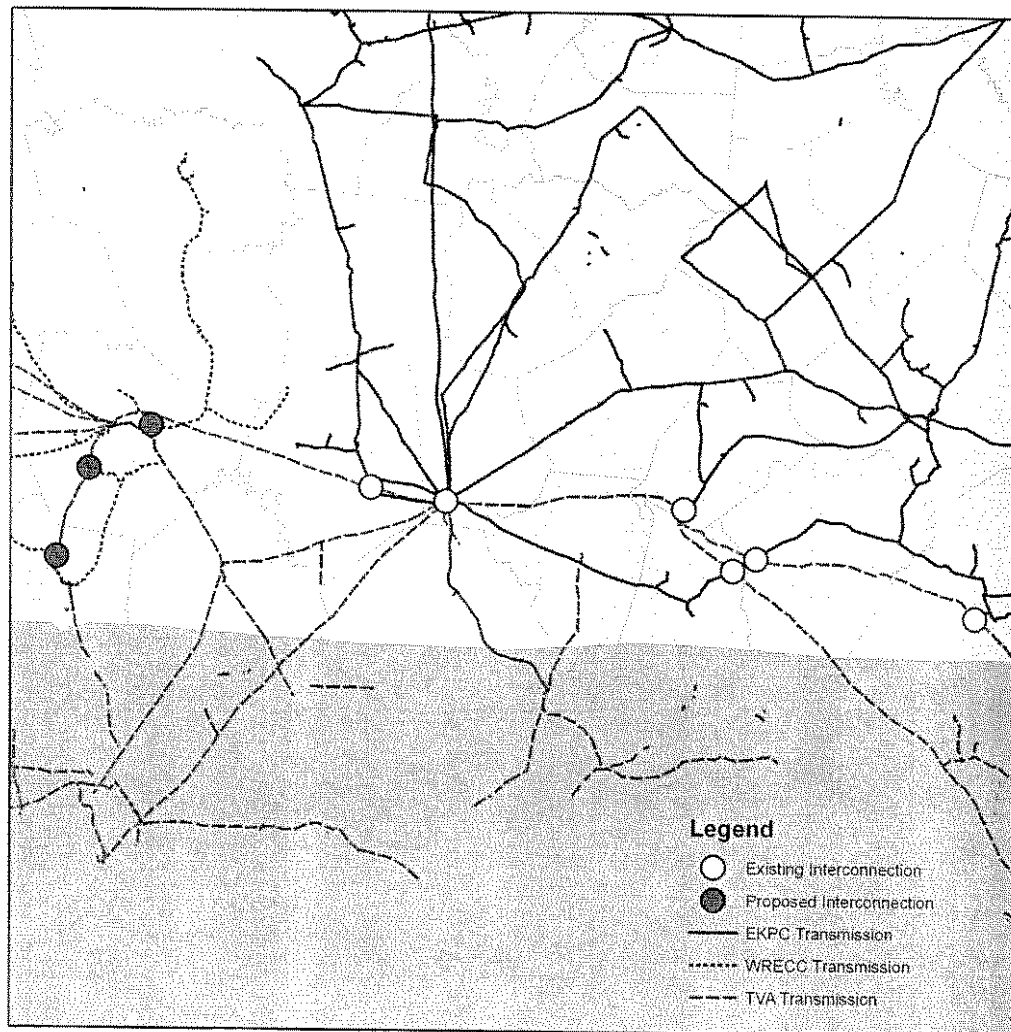


### **EKPC Seeks Three Additional Interconnections With TVA's System**

Because TVA has rejected EKPC's requests, EKPC is planning to construct nearly 97 miles of 161-kV transmission line to serve WRECC. The plan provides a strong backbone that stretches from EKPC's Barren County substation, which is the co-op's westernmost substation, west to WRECC's westernmost 161-kV delivery point at Aberdeen, with intermediate connections to the other WRECC delivery points.

In connection with the construction of these new facilities, EKPC requires three new interconnections with TVA's existing transmission system to provide reliability and voltage support for service to Warren, as well as an arrangement for backup service from TVA in the event of system outages.

**Figure 2: EXISTING & PROPOSED EKPC/TVA INTERCONNECTIONS**



On March 10, 2004, EKPC formally requested the interconnections by letter. On Aug. 20, 2004, TVA informed EKPC by letter that it would not agree to the proposed interconnections, even though EKPC already had six existing interconnections with TVA. As a result, EKPC filed an application in October 2004 with the Federal Energy

Regulatory Commission (FERC), requesting the Commission to order TVA to provide the interconnections under sections 210 and 212 of the Federal Power Act. On January 19, 2006, FERC ordered the interconnections.

These interconnections will:

- Enable EKPC to optimize use of system resources;
- Encourage conservation of energy and capital by providing WRECC with access to more economical sources of power; and
- Optimize use of existing facilities by allowing competition.

It is important to note that EKPC is willing to pay for the facilities necessary to implement the ordered interconnections, as well as operations and maintenance costs.

## WHAT FERC HAS SAID

On Jan. 19, 2006, FERC issued a final ruling on EKPC's request to order TVA to provide three interconnections. Below are excerpts of that and other FERC rulings on this matter.

### No 'Reasonable Alternative' for EKPC

To prevent EKPC from obtaining these services simply because doing so results in loop flows on TVA's system would appear to be unjustified. Loop flows have been, and can be, coordinated. Proper compensation can be ordered when a demonstrated burden exists. Furthermore, we do not agree with TVA that these flows are "deliberate," at least not in the sense relevant to this proceeding. For, although the loop flows are *foreseeable*, they are not *desired as an end in themselves*, but only as an unavoidable consequence of TVA's provision of coordination services to EKPC and Warren. If a reasonable alternative to the proposed interconnection existed, it would certainly have been explored; however, the only alternative in this case appears to be for EKPC to construct duplicative facilities needed to support voltages and provide backup power, even when such construction would seem to be inefficient and ignore the ability of EKPC to obtain such services under section 210(a)(1). We find this alternative to be unreasonable.

*(FERC, Final Order Directing Interconnection and Accepting Interconnection Agreement, As Modified, 114 FERC ¶ 61,035, paragraph 33)*

### 'EKPC Has Met The Applicable Standards;' No Standard For 'Mutual Benefit'

EKPC requests the Commission to include in the proposed order guidance on the question of whether the base case for a System Impact Study should reflect the status quo (EKPC's position) or whether the base case should assume that Warren's load on the TVA system and its TVA interconnections or delivery points do not exist (TVA's position). As an initial matter, the parties have discussed whether or not a "mutual benefits" standard applies to the interconnection request. TVA states that the applicable standard is that a single party can decline the interconnection if there would be any negative impacts on that party. We disagree. As discussed above, we find that EKPC has met the applicable standards under section 210 for an interconnection, which does not contain a mutual benefits standard.

*(FERC, Proposed Order Directing Interconnection, Establishing Further Procedures and Offering Settlement Judge Procedures, 111 FERC ¶ 61,031, paragraph 39)*

### **Base Case Study 'Should Reflect Status Quo'**

In addition, EKPC states that the question of which base case to use in the System Impact Study is relevant to the question of which system upgrades are needed to accommodate EKPC's request. In this regard, we agree with EKPC's position that the base case study should reflect the status quo, i.e., the existence of Warren's load on the TVA system as it exists today.

*(FERC, Proposed Order Directing Interconnection, Establishing Further Procedures and Offering Settlement Judge Procedures, 111 FERC ¶ 61,031, paragraph 40)*

### **Loop Flows: TVA Position 'Directly Contradicts Commission's Prior Rejection'**

EKPC has objected to TVA's efforts to treat inadvertent flows like scheduled transactions. In the excerpt below from FERC's final order in the interconnection case, the Commission clearly addresses this issue.

We agree with EKPC's position on this issue. TVA has consistently argued in this proceeding that EKPC's interconnection request is actually a transmission request. TVA is treating EKPC's interconnection request as a transmission-related service which directly contradicts the Commission's prior rejection of this position. As stated in the Proposed Order and the August 3 Order, our decision directing the proposed interconnection in the Proposed Order is based solely on section 210 of the FPA. The Commission specifically stated that it is not acting under section 211, and that it is not directing TVA to provide EKPC with transmission in this case, but is rather requiring TVA to provide only interconnection. To the extent there are any rates, terms or conditions associated with the interconnection or with coordination services, such as voltage outage and back-up power associated with the interconnection, TVA should establish rates, terms and conditions in the context of the Interconnection Agreement and not incorporate all of the rates, terms and conditions in its Transmission Service Guidelines in lieu of using standard Interconnection Agreement provisions.

We will, therefore, direct TVA to remove all provisions in the Interconnection Agreement that treat loop flow as firm point-to-point transmission service as well as the requirement for an annual System Impact Study which is only required in the context of transmission service and not in the context of interconnections. ...

*(FERC, Final Order Directing Interconnection and Accepting Interconnection Agreement, As Modified, 114 FERC ¶ 61,035, paragraphs 38-39)*

Nevertheless, TVA continues to treat loop flows as point-to-point transmission service. In a March 31, 2006, filing with FERC, TVA says "the flows resulting from the implementation of the proposed interconnections constitute transmission service for EKPC ..." TVA further states, "TVA has consistently maintained throughout this



proceeding that all of the flows associated with the FERC-ordered interconnections are not loop flows, but rather constitute transmission service for EKPC across the TVA system with direct delivery to Warren.”

### ‘We Expect TVA To Comply’

Excerpt from FERC’s Jan. 19, 2006 final order, including the Commission’s footnotes from that order below:

TVA stated that an additional “facilities study” and “project scoping workshop” must be performed initially, before specific costs and required interconnection facilities can be identified. We note that the August 3 Order directed TVA to provide an Interconnection Agreement with rates, terms and conditions for the proposed interconnection, and TVA has responded with filings that neither comply with Commission direction, nor provide any objections to the Commission’s timeframes or an explanation why TVA could not comply within those timeframes.<sup>30</sup> We believe that any studies or analyses necessary to identify what interconnection facilities or network upgrades are necessary should have been completed by now.<sup>31</sup> To the extent that any additional analysis or cost estimates are required, we direct TVA to complete such activities and submit the completed Facilities Matrix and estimated project costs to the Commission, as part of the compliance filing directed in this order below. If any conclusions cannot be determined within the time established, specific reasons should be given and a specific timeline as to when those conclusions will be available should be provided by TVA, with concurring or dissenting comments to be filed by EKPC.

*(FERC, Final Order Directing Interconnection and Accepting Interconnection Agreement, As Modified, 114 FERC ¶ 61,035, paragraph 41)*

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<sup>30</sup> Similarly, we also note TVA’s compliance filing in response to the Commission’s Proposed Order did not include an Interconnection Agreement with terms and conditions, as directed by the Commission. Failure to comply with the Commission’s directive necessitated a further Commission order directing TVA to file an Interconnection Agreement further delaying prompt resolution of this proceeding. We expect TVA to comply with all current and future Commission directives.

<sup>31</sup> Certainly details may change slightly as we move forward, but it seems unreasonable, particularly in absence of any argument to the contrary, that the initial interconnection design, with cost estimates, is not yet completed, given the Commission’s prior orders.

## EKPC& TVA SINCE THE FERC RULING

EKPC feels that TVA has been unwilling to fully comply with FERC's January order. For example:

- TVA continues to treat inadvertent loop flows as, in effect, point-to-point transmission service.
- TVA is refusing to model the three FERC-ordered connections as "normally closed" in regional reliability planning models of the time period after the interconnections are to be in place.
- TVA estimates for facility work associated with the interconnections is extraordinarily high compared to installed costs EKPC has seen in the normal course of business.

## ADDITIONAL POINTS

- **EKPC is willing to pay for the facilities necessary to implement the ordered interconnections, as well as operations and maintenance costs.** In its Jan. 19, 2006, order, FERC said TVA can apply for compensation for loop flows if it can demonstrate they are a burden to its system. EKPC has no objection to this contingency.
- **EKPC's modeling indicates that the three additional interconnections will address several existing problems on TVA's system.** EKPC's transmission plan to serve WRECC provides added reliability to the region's transmission network by alleviating existing and near-term constraints on the TVA 161 kV system. The studies performed indicate that with the transmission configuration that exists today—without the new interconnections requested by EKPC and ordered by FERC—seven TVA 161 kV transmission lines and one TVA 161-69 kV transformer will be at or above their rated capacities. EKPC's transmission plan reduces power flows on these facilities below their rated capacities.
- **TVA allowed WRECC the right to terminate its contract with TVA but now is interfering with the exercise of that right.** TVA was first asked to provide transmission service to WRECC and refused. EKPC does not agree that TVA cannot provide transmission service, but has not challenged TVA on this point. But, TVA's refusal required EKPC to look at new transmission and the related interconnections. How can WRECC reach another supplier if TVA will not provide transmission service and will not interconnect?
- **EKPC tried to resolve this matter with TVA without going to FERC.** EKPC met several times with TVA and provided information. TVA was informed that EKPC would go to FERC if necessary. EKPC anticipated that TVA would rather not have FERC precedent ordering it to interconnect, but TVA did not seem interested. Instead, TVA continued to insist that it would interconnect only if EKPC built 345-kV facilities that would carry Warren's load with not loop flow. If EKPC did so, the interconnections with TVA would not be needed and TVA was informed of this fact.